

CLAIMS

Having thus set forth the nature of the invention, what is claimed herein is:

1. In a tufting machine comprising a plurality of aligned needles arranged to reciprocate in a direction which, in use, is perpendicular to a backing material which is progressively fed through the machine; a hook associated with each needle which is oscillatedly moveable, in use, to pick up yarn from its associated needle, a loop engaging surface of the hook being, in use, at least 50 mm below the backing material; wherein each tuft is isolated from a tuft formed by an adjacent needle by a divider plate which extends in the direction of needle reciprocation for at least 20% of the distance between the backing material and the loop engaging surface of the hooks.
2. A tufting machine according to claim 1, wherein each divider plate extends for at least 30% and preferably at least 50% of the distance between the backing material and the loop engaging surface of the hook.
3. A machine according to claim 1, wherein each divider plate extends for up to 80% of the distance between the backing cloth and the loop engaging surface of the hook.
4. A machine according to claim 2, wherein each divider plate extends for up to 80% of the distance between the backing cloth and the loop engaging surface of the hook.

5. A tufting machine according to claim 1, including a needle plate having a series of reed fingers and each divider plate is an extension of a respective reed finger.
6. A tufting machine according to claim 2, including a needle plate having a series of reed fingers and each divider plate is an extension of a respective reed finger.
7. A tufting machine according to claim 3, including a needle plate having a series of reed fingers and each divider plate is an extension of a respective reed finger.
8. A tufting machine according to claim 1, having a needle plate including a series of reed fingers between each pair of which a needle reciprocates, a bed plate located beneath the needle plate, and a support block carried by the bed plate and the divider plates extend from the support block.
9. A tufting machine according to claim 2, having a needle plate including a series of reed fingers between each pair of which a needle reciprocates, a bed plate located beneath the needle plate, and a support block carried by the bed plate and the divider plates extend from the support block.
10. A tufting machine according to claim 3, having a needle plate including a series of reed fingers between each pair of which a needle reciprocates, a bed plate located beneath the needle plate, and a support block carried by the bed plate and the divider plates extend from the support block.

11. A tufting machine according to claim 1 having a hook bar for carrying said hooks, and the divider plates are mounted on upstanding on said hook bar.
12. A tufting machine according to claim 2 having a hook bar for carrying said hooks, and the divider plates are mounted on upstanding on said hook bar.
13. A tufting machine according to claim 3 having a hook bar for carrying said hooks, and the divider plates are mounted on upstanding on said hook bar.
14. A tufting machine as recited in claim 5, wherein said divider plate is enlarged at an end adjacent said hooks relative to an end adjacent said needle plate.
15. A tufting machine as recited in claim 11, wherein said divider plate is enlarged at an end spaced remote from said hooks relative to an end adjacent said hooks.